BPI's SCOPE 1 AND 2 DECARBONIZATION ROADMAP

In support of the Philippines' Nationally Determined Contributions (NDCs) to the Paris Climate Agreement, as well as the Climate Ambition of the Ayala Group of Companies, Bank of the Philippine Islands (BPI) has set the following decarbonization targets for its scope 1 and 2 Greenhouse Gas Emissions (GHG) emissions, from the 2021 baseline year:

- 50% scope 1 and 2 GHG emissions reduction by 2030
- 70% scope 1 and 2 GHG emissions reduction by 2050

DNV AS Philippines has performed a limited assurance of BPI's Scope 1 and 2 Decarbonization Roadmap, using GHG Protocol and ISO 14064-1 as the reporting criteria and using ISO 14064-3 as the verification approach and standard.

GOVERNANCE

BPI's Scope 1 and 2 Decarbonization Roadmap is governed by the Bank's Board-level Corporate Governance and Sustainability Committee (CGSCom), along with the Bank's senior management-level Sustainability Council.

The Bank's decarbonization roadmap is in line with the unique sustainability formula ESG+E_2, ensuring that economic benefits in the form of cost savings or risk mitigation are attained by the Bank as it decarbonizes its operations.

BASELINE GHG EMISSIONS

BPI has performed an accounting of its baseline GHG emissions for the year 2021, in line with the baseline year used by the rest of the Ayala Group of Companies.

SCOPE 1 & 2 GHG EMISSIONS AS OF 2021 (in '000 tCO2e)			
SCOPE 1			SCOPE 2
Stationary Combustion	Mobile Combustion	Fugitive Emissions	Purchased Electricity
0.14	0.12	18	23

TOTAL	41

In line with the GHG Protocol, BPI's accounting of scope 1 and 2 GHG emissions are limited to assets within the Bank's operational control, i.e. bank-owned facilities and bank-owned equipment used in the operations of the parent bank and 50%+ owned subsidiaries.

A notably negligible amount of electricity consumption from repossessed vehicle stockyards accounts for less than 0.2% of the Bank's total consumption. An even smaller consumption level

is estimated from foreclosed real estate and vehicle assets, given their extremely minimal use of electricity and fuel.

STATIONARY COMBUSTION

Scope, Limitations, and Methodologies

BPI's stationary combustion primarily emanates from generator sets used in corporate offices and branches nationwide.

To estimate GHG emissions emanating from generator sets for the baseline year, total fuel purchases for generators in 2021 were estimated through the average fuel purchases per site as of 2024.

Meanwhile, emission factors from the UK government[1] were used to convert fuel consumption data to emissions data.

Decarbonization Plan

As of baseline year 2021, stationary combustion comprises less than 1% of the Bank's scope 1 and 2 GHG emissions. Nevertheless, the Bank plans to explore low emission energy storage technologies such as batteries to further reduce emissions from such category.

Meanwhile, the Bank aims to maintain the low amount of emissions emanating from generator sets by replacing units over 25 years old, to prevent a significant decrease in fuel efficiency brought by aging. The Bank will also maintain its optimized testing time for generator sets, to prevent an unnecessary increase in GHG emissions.

MOBILE COMBUSTION

Scope, Limitations, and Methodologies

BPI's mobile combustion primarily emanates from bank-owned vehicles used by its Agency Banking Group, making the Bank's products and services more accessible to Filipinos across the country.

As of baseline year 2021, the Bank did not yet have any bank-owned vehicles. Agency Banking's bank-owned vehicles were acquired in December 2023.

To estimate GHG emissions from bank-owned vehicles, the Bank uses spend-based data converted to consumption in liters. Meanwhile, emission factors from the UK government[1] were used to convert fuel consumption data to emissions data.

Decarbonization Plan

To mitigate BPI's GHG emissions from mobile combustion, the Bank plans to explore shifting bank-owned vehicles from internal combustion engine (ICE) vehicles to plug-in hybrid electric vehicles (PHEVs) or hybrid electric vehicles (HEVs) when the opportunity arises, in locations where it is feasible.

FUGITIVE EMISSIONS

Scope, Limitations, and Methodologies

BPI's fugitive emissions primarily emanate from the following sources, namely:
a. Regular refrigerant leaks from air-conditioning units and refrigerators
b. Refrigerant leaks from disposed air-conditioning units and refrigerators after end-of-life

To estimate fugitive emissions from regular refrigerant leaks (i.e. released from air-conditioning units and refrigerators in the normal course of operations) for the baseline year, the Bank obtained conservative refrigerant leak rate assumptions for its entire inventory of air-conditioning units and refrigerators as of 2024. The total assumed refrigerant leaks for 2021 were then estimated using the average refrigerant leaks per site as of 2024.

Meanwhile, refrigerant leaks from disposed air-conditioning units and refrigerators after end-of-life were based on replacement year records. Full refrigerant charges were considered for the emissions from air-conditioning units and refrigerators for conservatism, due to the difficulty in estimating remaining refrigerant charges.

Emission factors from the California Air Resources Board[2] were used to convert refrigerant leaks data in kilograms to emissions data.

Decarbonization Plan

To reduce fugitive emissions, the Bank plans to convert all air-conditioning and refrigerator units to models using the refrigerant with the lowest Global Warming Potential (GWP) available in the market.

The Bank has been shifting its air-conditioning units to use the R-32 refrigerant. For larger facilities, the Bank uses air-conditioning units using the R-718 refrigerant. Meanwhile, the Bank has been shifting its refrigerators to use the R-600a refrigerant.

To prevent an increase in emissions, the Bank aims to replace air-conditioning units every 8 years and its refrigerators every 15 years.

The Bank is also planning the resell of air-conditioning units and refrigerators at end of life in the secondary market, to maximize the utility of residual refrigerants.

PURCHASED ELECTRICITY

Scope, Limitations, and Methodologies

BPI purchases electricity for the use of bank-owned corporate offices, branches, and other facilities.

To estimate GHG emissions emanating from purchased electricity for the baseline year, total electricity consumption in 2021 was estimated through the earliest available average electricity consumption per site.

Meanwhile, emission factors from the Department of Energy (DOE)[3] were used to convert electricity consumption data to emissions data.

Decarbonization Plan

Since 2022, the Bank has been shifting its facilities to use 100% renewable energy through the Green Energy Option Program (GEOP) and the Retail Aggregation Program (RAP). As of date, BPI Buendia Center (BBC), BPI Operations Center (BOC), BPI Consumer Center (BCC), and BPI Binondo, along with 70 bank branches have all shifted to use 100% renewable energy. The Bank plans to further maximize GEOP and RAP moving forward.

Furthermore, the Bank has been shifting to energy efficient technology such as LED lights, inverter air-conditioning units, and inverter refrigerators since 2012, to further reduce electricity consumption. To date, 100% of the Bank's branches already use LED lights.

The use of energy efficient technology also helps bank-owned branches acquire Excellence in Design for Greater Efficiencies (EDGE) certification from the International Finance Corporation (IFC). As of date, 34 of the Bank's branches are already IFC EDGE-certified, reaping at least 20% savings in electricity, water, and embodied energy in materials.

The Bank also aims to explore other initiatives such as the solarization of branches with a standalone physical structure to further reduce emissions. Installing solar panels in bank branches will also lead to additionality, contributing more supply of clean and renewable energy for the Philippines.

Finally, emissions from BPI's purchased electricity will also be decreasing along with the implementation of the Philippine Energy Plan (PEP), which aims for the country to have at least 50% of its electricity from renewable energy sources by 2050.

OTHER CONSIDERATIONS

In consideration of the above-mentioned GHG emissions mitigation plans, BPI has set the following decarbonization targets for its scope 1 and 2 GHG emissions, from the 2021 baseline year:

- 50% scope 1 and 2 GHG emissions reduction by 2030
- 70% scope 1 and 2 GHG emissions reduction by 2050

BPI reserves the right, however, to revisit and recalibrate its decarbonization strategy roadmap, in consideration of the ff. events:

- Major updates to generally accepted GHG accounting methodology
- Major advancements in market-available low-carbon technology
- Major changes in BPI's business strategy, including any mergers, acquisitions, and divestments

FOOTNOTES

1. **Emission Factors from the UK Government**
   https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2024
2. **Emission Factors from the California Air Resources Board**
   https://ww2.arb.ca.gov/resources/documents/high-gwp-refrigerants
3. **Emission Factors from the Department of Energy (DOE)**
   https://doe.gov.ph/electric-power/2015-2017-national-grid-emission-factor-ngef